

## General

### Title

Prostate cancer: number of radical prostatectomy procedures performed by a surgeon over a 1 year period.

### Source(s)

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Prostate cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jul. 38 p. [21 references]

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Structure

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the number of radical prostatectomy procedures performed by a surgeon over a 1 year period.

Note from the National Quality Measures Clearinghouse: This measure is part of the Cancer Quality Performance Indicators (QPIs) collection. For more information, including a complete list of QPI measure sets, please visit the [Healthcare Improvement Scotland Web site](#)

## Rationale

Radical prostatectomy should be performed by surgeons who work in high-volume hospitals, with outcomes audited regularly (Comprehensive Cancer Centre the Netherlands, 2007; Heidenreich et al., 2010).

The European and North American literature supports the view that there is a relationship between increasing surgeon volume and improved patient outcomes, for example, rates of post-operative and late

urinary complications and positive surgical margin rates (Heidenreich et al., 2010).

Studies have shown that there is a clear link between surgeon experience and improved clinical outcomes and this continues to increase with the number of cases undertaken (Vickers et al., 2009; Vickers et al., 2007; Vesey et al., 2012).

For robotic assisted radical prostatectomy it has been suggested that individual surgeons should undertake a minimum of 50 to 100 cases per annum (Anderson et al., 2012).

## Evidence for Rationale

Anderson JB, Clarke NC, Gillatt D, Dasgupta P, Neal DE, Pickard RS, Prostate Cancer Advisory Group. Advice on the development of robotic assisted radical prostatectomy in England. London (UK): The British Association of Urological Surgeons (BAUS); 2012. 26 p. [17 references]

Comprehensive Cancer Centre the Netherlands. Prostate cancer. [internet]. Amsterdam (The Netherlands): Association of Comprehensive Cancer Centres (ACCC); 2007 [accessed 2013 Aug 01].

Heidenreich A, Bolla M, Joniau S, et al, members of the European Association of Urology (EAU) Guidelines Office. Guidelines on prostate cancer. Arnhem (The Netherlands): European Association of Urology (EAU); 2010.

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Prostate cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jul. 38 p. [21 references]

Vesey SG, McCabe JE, Hounscome L, Fowler S. UK radical prostatectomy outcomes and surgeon case volume: based on an analysis of the British Association of Urological Surgeons Complex Operations Database. BJU Int. 2012 Feb;109(3):346-54. [PubMed](#)

Vickers AJ, Bianco FJ, Serio AM, Eastham JA, Schrag D, Klein EA, Reuther AM, Kattan MW, Pontes JE, Scardino PT. The surgical learning curve for prostate cancer control after radical prostatectomy. J Natl Cancer Inst. 2007 Aug 1;99(15):1171-7. [PubMed](#)

Vickers AJ, Savage CJ, Hruza M, Tuerk I, Koenig P, Martinez-Pineiro L, Janetschek G, Guillonneau B. The surgical learning curve for laparoscopic radical prostatectomy: a retrospective cohort study. Lancet Oncol. 2009 May;10(5):475-80. [PubMed](#)

## Primary Health Components

Prostate cancer; radical prostatectomy; volume of cases per surgeon

## Denominator Description

This measure applies to surgeons who perform radical prostatectomy (one surgeon at a time).

## Numerator Description

Number of radical prostatectomies performed by each surgeon in a given year

## Evidence Supporting the Measure

## Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

The collection of data is piloted on a small number of patient records using a paper data collection form produced by Information Services Division (ISD). The aim is to identify any anomalies or difficulties with data collection prior to full implementation. At least one NHS board in each Regional Cancer Network participates in the pilot.

## Evidence for Extent of Measure Testing

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p.

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Hospital Inpatient

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

## Statement of Acceptable Minimum Sample Size

Does not apply to this measure

## Target Population Age

Does not apply to this measure

## Target Population Gender

Does not apply to this measure

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Not within an IOM Care Need

## IOM Domain

Not within an IOM Domain

# Data Collection for the Measure

## Case Finding Period

Unspecified

## Denominator Sampling Frame

Professionals/Staff

## Denominator (Index) Event or Characteristic

Health Professional Characteristic

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

Inclusions

Surgeons who perform radical prostatectomy (one surgeon at a time)

Exclusions

None

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

Inclusions

Number of radical prostatectomies performed by each surgeon in a given year

Exclusions

None

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Electronic health/medical record

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Count

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

## Prescriptive Standard

Target: Minimum 50 procedures per surgeon in a 1 year period.

This is a minimum target level and is designed to ensure that all surgeons performing radical prostatectomy perform a minimum of 50 procedures per year.

Note: It is recommended that where two consultants operate together on the same patient the case should be counted under the lead surgeon.

## Evidence for Prescriptive Standard

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Prostate cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jul. 38 p. [21 references]

## Identifying Information

### Original Title

QPI 6 – volume of cases per surgeon.

### Measure Collection Name

Cancer Quality Performance Indicators (QPIs)

### Measure Set Name

Prostate Cancer

## Submitter

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

## Developer

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

## Funding Source(s)

Scottish Government

## Composition of the Group that Developed the Measure

Prostate Cancer QPI Development Group

## Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2016 Jul

## Measure Maintenance

The Cancer Quality Performance Indicators (QPIs) will be kept under regular review and be responsive to changes in clinical practice and emerging evidence. Formal reviews are conducted every 3 years and baseline checks each year.

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

## Measure Availability

Source document available from the [Healthcare Improvement Scotland Web site](#) .

For more information, contact the Healthcare Improvement Scotland at Gyle Square, 1 South Gyle Crescent, Edinburgh, Scotland EH12 9EB; Phone: 0131 623 4300; E-mail: [comments.his@nhs.net](mailto:comments.his@nhs.net); Web site: [www.healthcareimprovementscotland.org/](http://www.healthcareimprovementscotland.org/) .

## Companion Documents

The following is available:

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p. This document is available from the [Healthcare Improvement Scotland Web site](#) .

## NQMC Status

This NQMC summary was completed by ECRI Institute on May 31, 2017.

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## Production

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